# STATE OF ALASKA NATIONAL GUARD RETIREMENT SYSTEM

Actuarial Valuation as of June 30, 1984

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#### **Benefit Services / Consulting Actuaries**

#### SUMMARY

In accordance with your request, we have completed a valuation of the Alaska National Guard Retirement System as of June 30, 1984. The principal results of the actuarial valuation are presented in this summary and analysis; the two sections which follow are meant to provide the necessary supporting details.

Section 1 presents the fundamental information on which the valuation was based. Included is a summary of plan provisions, information about plan participants, and disclosure of the actuarial method and assumptions used.

Section 2 presents the detailed actuarial valuation results. Its sub-sections present a step-by-step derivation of the recommended contribution.

The purposes of an actuarial valuation are:

- 1. To examine the status of funding of the Plan, and
- 2. To determine the annual contribution for fiscal year 1987-88.

The most significant results of the valuation are as follows:

(1)		us of Funding as of e 30	<u>1982</u>	1984
	(a)	Valuation Assets	\$ 420,400	\$2,016,990
	(b)	Present Value of Accrued Benefits	11,253,643	7,761,389
	(c)	Accrued Benefit Funding Ratio	3.74%	25.99%
(2)	Reco	mmended Contributions	FY85 & FY86	FY87 & FY88
	(a)	Normal Cost	\$ 399,292	542,950
	(b)	Past Service Cost	939,671	498,267
	(c)	Total Cost	1,338,963	1,041,217

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us, to determine a sound value for the Plan liabilities. I certify that, to the best of my knowledge and belief, the attached statements are true and correct.

Respectfully submitted,

Robert F. Richardson, ASA

Robert F. Richardson

Principal

RFR/jam

March 6, 1985

#### ANALYSIS OF THE NATIONAL GUARD RETIREMENT SYSTEM

This actuarial valuation report is based upon the same actuarial method and assumptions as used in the prior report. As can be seen in the prior summary, there was a significant drop in both the present value of the accrued benefits and total cost of the Plan. Both of these increases are directly attributable to the significant drop in average credited services.

As can be seen in Section 1.2, the average Alaska Guard and U.S. Armed Forces Service decreased from 9.54 years to 7.86 years.

In summary, funding progress of the Alaska National Guard Retirement System is being achieved. During the next two years, we anticipate that assets will exceed \$3.3 million and that the funding ratio will be in the 35% to 40% range.

## SECTION 1 THE BASIS OF THE VALUATION

The foundation of an actuarial valuation is the information and assumptions used in preparing it. In this section, the salient Plan provisions, employee census data, and actuarial methods and assumptions used in preparing the valuation are outlined.

### 1.1 OUTLINE OF THE NATIONAL GUARD PENSION PLAN

- 1. Effective Date January 1, 1973.
- 2. <u>Eligibility</u> All guard members active on January 1, 1969 or thereafter.
- 3. Normal Retirement
  - (a) Eligibility -
    - (i) Voluntary retirement:

      after 20 years total service in the Guard and U.S. Armed
      Forces (at least 5 years in the Guard).
    - (ii) Involuntary retirement, at any time.
  - (b) Benefit \$100 per month for as many months as the member was active in the Guard.
- 4. <u>Vesting</u> 100% after 20 years of total service in the Guard and U.S. Armed Forces (at least 5 years in the Guard).
- 5. <u>Death Benefits of Vested Members</u> Lump-sum payment of remaining months' pension payable to designated beneficiary.

# 1.2 MISCELLANEOUS INFORMATION AS OF JUNE 30

### Active Members

		1981	<u>1982</u>	<u>1984</u>
(1)	Number	2,786	3,094	3,149
(2)	Average Age	31.16	31.59	32.14
(3)	Average Alaska Guard			
	Service	<u>-</u> '-	-	5.32
(4)	Average Alaska Guard and			
	U.S. Armed Forces Service			
	(up to 5 years)	9.29	9.54	7.86

### Retirees and Beneficiaries

(1)	Number	148	275	356
(2)	Average Age	53.08	52.84	53.70
(3)	Average Years Remaining	13.27	15.35	14.92

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#### 1.4 ACTUARIAL METHOD AND ASSUMPTIONS

Valuation of Liabilities

- A. Actuarial Method Attained Age Normal. The unfunded accrued benefit liability is amortized over 25 years.
- B. Actuarial Assumptions -
  - 1. Interest

8% per year, compounded annually, net of investment expenses.

2. Mortality

1984 Unisex Pension Mortality Table.

3. Turnover

Turnover is assumed at 25% in the first year, and at 8% in the second; both rates are independent of age. Turnover after the second year is assumed to follow the T-3 Table published in the Pension Actuary's Handbook. Sample rates are:

<u>Age</u>	Rate
30	.04829
40	.03859
50	.01702
60	.01835

4. Disability

Disability rates under Group Long Term Disability policies, as given in the 1978 Society of Actuaries study.

5. Retirement Age

Members are assumed to retire after 20 years of service, except:

- (1) if this occurs before age 55, they will work one-half of the remaining years to age 55.
- (2) if this occurs after age 60, they will retire at age 60.

## SECTION 2 DETAILED VALUATION RESULTS

This section presents in detail the results of the actuarial valuation that were outlined in the Summary.

### 2.1 SUMMARY OF FINANCIAL TRANSACTIONS

	FY83	FY84
Net Assets Available for Benefits,		
Beginning of Year	\$ 435,900	\$1,200,550
Additions:		
Employer Contributions	1,202,200	1,202,200
Investment Income	0	161,990
	1,202,200	1,364,190
Deductions:		
Retirement Benefits	437,550	547,750
	437,550	547,750
Net Assets Available for Benefits,		
End of Year	\$1,200,550	\$2,016,990

## 2.2 BREAKDOWN OF PRESENT VALUE OF BENEFITS

	Present Value of Accrued Benefits	Present Value of Fully Projected Benefits
Active Members		
Retirement Benefits	\$ 2,558,835	\$ 5,469,819
Termination Benefits*	1,045,157	1,845,476
Death Benefits	320,841	611,551
Disability Benefits	164,307	267,918
Subtotal	\$ 4,089,140	\$ 8,194,764
Inactive Members		
Retirees	\$ 3,672,249	\$ 3,672,249
<u>Totals</u>	\$ 7,761,389	\$11,867,013

<sup>\*</sup> Members who terminate before assumed retirement age, but after 20 years of service.

### 2.3 DEVELOPMENT OF NORMAL COST

(1)	Present Value of Fully Projected Benefits	\$11,867,013
(2)	Present Value of Accrued Benefits	7,761,389
(3)	Present Value of Future Consolidated Employer Contributions (1) - (2)	4,105,624
(4)	Average Present Value of Future Service	7.5617
(5)	Normal Cost (3) / (4)	\$ 542,950

### 2.4 CALCULATION OF TOTAL CONTRIBUTION

(1)	Present Value of Accrued Benefits	\$ 7,761,389
(2)	Assets	2,016,990
(3)	Total Unfunded Liability (1) - (2)	5,744,399
(4)	25-Year Amortization Factor	11.528758
(5)	Past Service Payment (3) / (4)	498,267
(6)	Normal Cost	542,950
(7)	Total Annual Contribution (5) + (6)	\$ 1,041,217